Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS:

1. (Currently Amended) A reproduction apparatus for selecting an audio stream from a plurality of audio streams written in a stream number table, and reproducing the selected audio stream together with a video stream, the reproduction apparatus comprising:

a selecting unit operable to make a judgment on which among a plurality of predetermined conditions are satisfied by each of the plurality of audio streams written in entries of the stream number table, the entries corresponding one-to-one to the plurality of audio streams, and to select an audio stream to be reproduced among the plurality of audio streams, in accordance with each combination of predetermined conditions satisfied by each audio stream; and

a reproducing unit operable to reproduce the selected audio stream, wherein

one of the plurality of predetermined conditions is that a channel attribute of an audio stream is surround and a surround output is available basic data of an audio frame of an audio stream to be selected has a stereo attribute, extended data of the audio frame of the audio stream to be selected has a surround attribute, and a surround output of the extended data of the audio frame of the audio stream to be selected can be processed,

if an audio frame of a target audio stream is composed of basic data and extended data, the selecting unit judges whether or not the predetermined condition is satisfied by detecting whether or not a channel attribute of the extended data is surround and the extended data is capable to be processed, and

when there is at least one audio stream satisfying the predetermined condition among the plurality of audio streams written in the entries of the stream number table, the selecting unit selects the audio stream satisfying the predetermined condition as the audio stream to be reproduced among the plurality of audio streams.

2. (Original) The reproduction apparatus of claim 1, further comprising:

a status register that stores a first flag group, which corresponds to basic data of a plurality of encoding methods, and a second flag group which corresponds to extended data of the plurality of encoding methods, wherein

the first flag group is composed of a plurality of flags that indicate, for each of the plurality of encoding methods, whether or not the reproduction apparatus has a capability to process the basic data,

the second flag group is composed of a plurality of flags that indicate, for each of the plurality of encoding methods, whether or not the reproduction apparatus has a capability to process the extended data, and

the detection of whether or not the extended data is capable to be processed is accomplished by checking whether or not a value set in a flag, which belongs to the first flag group and corresponds to the target audio stream, is a predetermined value.

3. (Original) The reproduction apparatus of claim 2, wherein

the capability to process the extended data is categorized into three levels referred to as a first level, a second level, and a third level, wherein at the first level, it is capable to decode the extended data and output a result of the decoding as a surround output; at the second level, it is capable to decode the extended data and output a result of the decoding as a stereo output; and at the third level, nether a surround output nor a stereo output is available, and

the predetermined value is a value indicating the first level.

4. (Original) The reproduction apparatus of claim 1, wherein

the detection of whether or not the extended data is capable to be processed is accomplished by checking whether or not either the reproduction apparatus or a device connected to the reproduction apparatus has a capability to decode the extended data.

5. (Original) The reproduction apparatus of claim 1, wherein

the detection of whether or not the extended data is capable to be processed is accomplished by checking whether or not it is capable to transmit either the extended data that has been compressed or non-compressed digital data that has been obtained by decoding the extended data, to a connected device.

6. (Original) The reproduction apparatus of claim 1, wherein

the detection of whether or not the extended data is capable to be processed is accomplished by checking whether or not a speaker of a connected device supports surround audio.

7. (Currently Amended) A non-transitory computer readable medium storing a program that causes a computer to execute the steps of:

making a judgment on which among a plurality of predetermined conditions are satisfied by each of a plurality of audio streams written in entries of a stream number table, the entries corresponding one-to-one to the plurality of audio streams, and selecting an audio stream to be reproduced among the plurality of audio streams, in accordance with each combination of predetermined conditions satisfied by each audio stream; and

reproducing the selected audio stream, wherein

one of the plurality of predetermined conditions is that a channel attribute of an audio stream is surround and a surround output is available basic data of an audio frame of an audio stream to be selected has a stereo attribute, extended data of the audio frame of the audio stream to be selected has a surround attribute, and a surround output of the extended data of the audio frame of the audio stream to be selected can be processed,

if an audio frame of a target audio stream is composed of basic data and extended data, the audio stream selecting step judges whether or not the predetermined condition is satisfied by detecting whether or not a channel attribute of the extended data is surround and the extended data is capable to be processed, and

when there is at least one audio stream satisfying the predetermined condition among the plurality of audio streams written in the entries of the stream number table, the selecting of the audio stream to be reproduced further includes selecting the audio stream satisfying the predetermined condition as the audio stream to be reproduced among the plurality of audio streams.

8. (Currently Amended) A reproduction method for selecting an audio stream from a plurality of audio streams written in a stream number table, and reproducing the selected audio stream together with a video stream, the method comprising:

making a judgment on which among a plurality of predetermined conditions are satisfied by each of the plurality of audio streams written in entries of the stream number table, the entries corresponding one-to-one to the plurality of audio streams, and selecting an audio stream to be reproduced among the plurality of audio streams, in accordance with each combination of predetermined conditions satisfied by each audio stream; and

reproducing the selected audio stream, wherein

one of the plurality of predetermined conditions is that a channel attribute of an audio stream is surround and a surround output is available basic data of an audio frame of an audio stream to be selected has a stereo attribute, extended data of the audio frame of the audio stream to be selected has a surround attribute, and a surround output of the extended data of the audio frame of the audio stream to be selected can be processed,

if an audio frame of a target audio stream is composed of basic data and extended data, the audio stream selecting step judges whether or not the predetermined condition is satisfied by detecting whether or not a channel attribute of the extended data is surround and the extended data is capable to be processed, and

when there is at least one audio stream satisfying the predetermined condition among the plurality of audio streams written in the entries of the stream number table, the selecting of the audio stream to be reproduced further includes selecting the audio stream satisfying the predetermined condition as the audio stream to be reproduced among the plurality of audio streams.

- 9. (Previously Presented) The reproduction apparatus of claim 1, wherein an encoding method of the target audio stream is DD/DD+, and the basic data of the audio frame is an independent substream and the extended data of the audio frame is a dependent substream.
- 10. (Previously Presented) The reproduction apparatus of claim 1, wherein an encoding method of the target audio stream is DTS-HD, and the basic data of the audio frame is a core substream and the extended data of the audio frame is an extension substream.
- 11. (Previously Presented) The reproduction apparatus of claim 1, wherein an encoding method of the target audio stream is DD/MLP, and the basic data of the audio frame is DD(AC-3) data and the extended data of the audio frame is an MLP audio.
- 12. (Previously Presented) The reproduction apparatus of claim 1, wherein:
 encoding methods of the target audio stream include DD/DD+, DTS-HD, DD/MLP;
 the basic data of the DD/DD+ is an independent substream and the extended data of the DD/DD+, of the audio frame is a dependent substream;

the basic data of the DTS-HD is a core substream and the extended data of the DTS-HD is an extension substream; and

the basic data of the DD/MLP is DD(AC-3) data and the extended data of the DD/MLP is an MLP audio.